

IN THE CLAIMS:

1. (currently amended) A method of controlling a network which includes a plurality of network elements connected via a plurality of links, and provides a plurality of communications services to end-users of the network, said method comprising the steps of:

creating view-configuration information based on network-configuration information with respect to each of the plurality of communications services such that the view-configuration information is related to the network-configuration information, said view-configuration information providing a basis for creating a plurality of communications service-specific views of the network that correspond to the respective communications services, wherein each communications service specific view includes ones of the plurality of network elements and ones of the plurality of links that are required for providing an associated communications service to the end-users of the network; and

displaying selected one or more of the communications service-specific views by presenting each view based on the view-configuration information with respect to each of the communications services, said each view including both or either one of a physical network configuration of the network and a logical network configuration of the network.

2. (original) The method as claimed in claim 1, wherein said step of creating includes the steps of:

selecting network elements and links from a network configuration represented by the network-configuration information; and

creating the view-configuration information according to the selected network elements and links.

3. (original) The method as claimed in claim 1, wherein said step of creating includes the steps of:

selecting a connection from a network configuration represented by the network-configuration information, and
creating the view-configuration information according to the selected connection.

4. (original) The method as claimed in claim 1, wherein said step of creating includes the steps of:

selecting ports of network elements from a network configuration represented by the network-configuration information; and
creating the view-configuration information according to the selected ports.

5. (original) The method as claimed in claim 1, wherein said step of creating includes the steps of:

specifying attribute conditions of connections; and
creating the view-configuration information by extracting network elements and links relating to at least one connection that matches the specified attribute conditions.

6. (currently amended) The method as claimed in claim 1, wherein said step of creating includes the steps of:

specifying a communications service name; and

creating the view-configuration information by extracting network elements and links relating to connections that provide the specified communications service name.

7. (currently amended) The method as claimed in claim 1, further comprising the steps of:

providing matches between failure levels and failure labels with respect to different types of failures, the failure levels indicating significance of failures either as physical failures or as communications service failures; and
displaying a failure level of a failure occurring in the network in association with the displayed view.

8. (original) The method as claimed in claim 7, further comprising the steps of:
controlling the failures by a unit of a node or a port of a node; and
selecting a failure level of a connection by finding a largest failure level along the connection, and displaying the failure level of the connection in association with the displayed view.

9. (original) The method as claimed in claim 1, further comprising a step of selecting nodes and links on the displayed physical network configuration to set a route between edges.

10. (original) The method as claimed in claim 1, wherein said step of selecting includes the steps of:

selecting the edges on the displayed physical network configuration; and

setting the route between the edges by extracting nodes and links so as to use as small a number of intervening edges and links between the selected edges.

11. (currently amended) A system for controlling a network including a plurality of network elements and a plurality of links, said system comprising:

a database which stores network-configuration information and view-configuration information such that the view-configuration information is related to the network-configuration information;

a service-management server which attends to registering and updating of the information stored in the database, and defines communications service-specific views of a physical network configuration and a logical network configuration with respect to each of the a plurality of communications services provided to end-users of the network, based on the view-configuration information stored in said database, wherein each communications service-specific view includes ones of the plurality of network elements and ones of the plurality of links that are required for providing an associated communications service to the end-users of the network;

a network-management server which collects information on configurations of the network elements and the links as well as information on failures, and informs said service-management server of a change in at least one of the configurations and the failures for a purpose of said updating; and

a client which displays both or either one of the physical network configuration and the logical network configuration with respect to said client's own communications service by selecting one of the communications service-specific views that corresponds to said client's own communications service.

12. (currently amended) The system as claimed in claim 11, wherein said network-management server includes a failure-level-conversion table that provides matches between failure levels and failure labels with respect to different types of failures, the failure levels indicating significance of failures either as physical failures or as communications service failures.

13. (original) The system as claimed in claim 11, wherein said service-management server includes a connection-setting unit which controls settings of a connection between edges based on the edges, nodes and links selected from the physical network configuration.

14. (currently amended) The method as claimed in claim 1, wherein the view-configuration information is created such that network elements and links that are added during operation of the displayed communications services are added in real time to the selected one or more communications service-specific views.

15. (currently amended) The system as claimed in claim 11, wherein the client adds network elements and links that are added during operation of the client's communications service to the display of the selected communications service-specific view in real time.

16. (new) A method of controlling a network which includes a plurality of network elements connected via a plurality of links, and provides a plurality of

communications services to end-users of the network, said method comprising the steps of:

creating view-configuration information based on network-configuration information with respect to each of the plurality of communications services such that the view-configuration information is related to the network-configuration information, said view-configuration information providing a basis for creating a plurality of communications service-specific views of the network that correspond to the respective communications services, wherein each communications service specific view includes ones of the plurality of network elements and ones of the plurality of links and ones of a plurality of logical links that are required for providing an associated communications service to the end-users of the network; and

displaying selected one or more of the communications service-specific views by presenting each view based on the view-configuration information with respect to each of the communications services, said each view including both or either one of a physical network configuration of the network and a logical network configuration of the network.